

Notes from Oregon Breast Milk Call 7/21/09

Ultimate goal- Compare different models as to ability to predict daily dose to infant starting from daily dose to mother.

Action items: (To have ready for Check-in call on Friday at 11 am)

Dana: find realistic PCB-153 fish concentration from Portland Harbor

Dave: Ask other modelers about the 22% maternal body fat and let them know that we are planning on using 30%. Make sure that won't be too problematic for model comparison.

Dave: Ask other modelers about infant exposure duration and let them know that we are planning on using 6 months

Dave: Ask Dave McBride about possibility of presenting at the Fish Conference in November

Mike: Gussy-up the spreadsheet and run it with 6 month infant exposure in mind. Mike also agreed to run the 4 calculations based on the parameters we agreed on (below)

Decisions:

Fish concentration: Representative PCB-153 number from Portland Harbor (Dana)

Fish intake Rate: 18g/day (rounded up from 17.5 and related to FDA)

Body Weight: 64 Kg (agreed from previous phone call)

Half-life: 3.8 and 27.5 (ATSDR Tox profile- range omitting the high and the low)

Fraction of PCB stored in fat: 90% (from incineration guidance)

Percent of mother that is fat: We use 30% (guidance) but

Concentration PCBs in milk fat in ng/g-lipid (Standard in public health and academic literature)

Intake for infant: Convert based on 6 month exposure duration

Duration of Lactation: 6 months

Percent milk fat: 4 and 8

f_5 = Average fraction of initial chemical concentration present in human milk during one year of breast feeding (0.55) **(To be adjusted based on 6 month Exposure Duration) by Mike**

ED_i = 6 months

EF_i = Exposure frequency of breast-feeding infant (365 days/year)